

PENDING CLAIMS

1-9. (Cancelled)

10. (Previously Presented) A method of forming an electrode layer for a flat capacitor, the method comprising:

placing a sheet between a punch and a die having a die hole;

delivering a lubricant to a lubrication dam extending around a periphery of an upper end of the die hole, the lubrication dam including a ridge and a lubrication reservoir area behind the ridge, wherein the ridge does not extend around the entire periphery of the upper end of the die hole such that the ridge includes an opening to the interior of the die hole so as to direct the lubricant from the lubrication reservoir area behind the ridge to the interior of the die hole at the opening in the ridge; and

actuating the punch to punch an electrode layer out of the sheet, wherein the location of the sheet at the lubrication dam ridge opening receives more lubricant than sheet locations around the rest of the periphery not at the ridge opening.

11. (Original) The method of claim 10, wherein delivering a lubricant includes delivering a fluorinated or partially fluorinated fluid.

12. (Previously Presented) The method of claim 10, wherein placing a sheet includes placing a sheet having an aluminum oxide portion and an aluminum portion, the lubricant being directed to the periphery of the die hole at the location where the punch cuts through the aluminum portion.

13-52. (Cancelled)

53. (Withdrawn) The method of claim 10, wherein delivering the lubricant to the periphery of the die hole includes providing a lubrication dam located around the periphery of the die hole

and communicating with a lubrication inlet, the lubrication dam configured to concentrate a lubricant at the pre-determined location on the periphery of the die hole.

54. (Withdrawn) The method of claim 53, wherein the dam includes a ridge located about an upper surface of the die hole.

55. (Withdrawn) The method of claim 10, wherein the pre-determined location is less than 1/4 of the total perimeter length of the periphery of the die hole.

56. (Withdrawn) The method of claim 10, wherein the lubricant is compatible with a chemistry of the sheet such that the lubricant does not need to be cleaned off of the electrode layer after being punched.

57. (Previously Presented) The method of claim 10, wherein the lubricant includes a fluorinated fluid.

58. (Withdrawn) The method of claim 10, wherein placing the sheet between the punch and the die includes placing the sheet between the punch and the die, the punch guided by a punch guide, there being no stripper plate between the punch guide and the die.

59. (Withdrawn) The method of claim 10, wherein actuating the punch includes actuating the punch upwardly.

60. (Withdrawn) The method of claim 10, further comprising picking the punched electrode layer out of a back side of the die.

61. (Withdrawn) The method of claim 60, wherein a top surface of the punch extends through the die above the second side of the die before the electrode layer is taken off of the punch.

62. (Withdrawn) The method of claim 60, wherein the punched electrode layer includes an aluminum oxide portion and an aluminum tab portion and wherein picking the punched electrode layer includes picking the electrode layer off of the punch using a vacuum member having two independent vacuum ports, one port located to attach to the aluminum oxide portion and one port located to attach to the aluminum tab portion.

63. (Withdrawn) The method of claim 10, wherein the electrode layer is punched out of the sheet without applying any compression forces on the sheet before the punch contacts the sheet.

64. (Previously Presented) The method of claim 10, wherein the lubricant is directed to a specific location on the periphery of the die hole.

65. (Previously Presented) A method of forming an electrode layer for a flat capacitor, the method comprising:

placing a sheet having a distinct aluminum oxide portion and a distinct aluminum portion between a punch and a die having a die hole, the die hole including an open upper end and defining a periphery around the open end;

delivering a lubricant to a lubrication dam located at the periphery of the open upper end of the die hole, the lubrication dam including a ridge and a lubrication reservoir area behind the ridge, wherein the ridge does not extend around the entire periphery of the upper end of the die hole such that the ridge includes an opening to the interior of the die hole so as to direct the lubricant to a specified, pre-determined location on the periphery of the open upper end of the die hole at the opening in the lubrication dam ridge to the interior of the die hole at the location where the punch will cut through the aluminum portion of the sheet and such that the specified, pre-determined location at the ridge opening to the die hole on the periphery of the open upper end of the die hole has more lubricant than other locations on the periphery of the open upper end of the die hole; and

actuating the punch to punch an electrode layer out of the sheet, wherein the location of the sheet at the lubrication dam ridge opening receives more lubricant than sheet locations not at the ridge opening.

66. (Previously Presented) The method of claim 65, wherein delivering a lubricant includes delivering a fluorinated or partially fluorinated fluid.

67. (Cancelled)